

ABSTRACT OF THE DISCLOSURE

A wire processing apparatus includes a microwave generator, a microwave transmitter, a waveguide coaxial converter and a wire insertion pipe, and the wire insertion pipe is disposed in the waveguide coaxial converter. In wire recycling process, after a tip end of a coated wire is inserted into the wire insertion pipe, microwave is launched into the inside of the waveguide coaxial converter. The tip end of the coated wire is separated into a decomposed coating insulator and a molten electric conductor by microwave. In wire cross-linking process, after microwave is launched into the inside of the waveguide coaxial converter, the coated wire is inserted into the wire insertion pipe. The coated wire is cross-linked by high frequency heat and a coating insulator is adhered well to an electric conductor by heat shrinking.